IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

UNITED STATES, et al.,	)	
	)	
Plaintiffs,	)	
v.	)	No. 1:23-cv-00108-LMB-JFA
	)	
GOOGLE LLC,	)	
	)	
Defendant.	)	

PLAINTIFFS' OPPOSITION TO GOOGLE LLC'S MOTION TO EXCLUDE THE TESTIMONY OF DR. TIMOTHY SIMCOE

INTRODUCTION[1]

Plaintiffs oppose Defendant Google LLC's ("Google") Motion to Exclude the Testimony of Dr. Timothy Simcoe (ECF No. 580) ("Def. Br."). Dr. Simcoe is a well-regarded econometric expert who engaged in traditional, well-accepted empirical analyses to arrive at a conservative estimate of how much Google overcharged its ad exchange customers. Dr. Simcoe offers opinions concerning the fee (or "take rate")[2] that Google would be able to charge for AdX, Google's ad exchange, in a hypothetical "but for" world in which Google had not engaged in anticompetitive conduct across the digital advertising technology ("ad tech") stack for over a decade. In addition, Dr. Simcoe offers an opinion about how Google's overcharge for AdX services should be apportioned between AdX's publisher and advertiser customers, as Google's anticompetitive conduct impacts both.

In reaching his opinions about the AdX overcharge borne by advertisers, Dr. Simcoe employs three separate, time-honored, econometric methodologies: (1) a **Comparables Approach** that mathematically compares the take rate charged by AdX to its competitors in the real world; (2) an **Event Study Analysis** that models how much Google would have to lower its take rates to achieve the real-world impact of some of its anticompetitive practices; and (3) a

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[1] With no notice or conferral, at approximately 6:00pm ET yesterday, May 16, 2024, Google filed a Motion to Strike Jury Demand and to Dismiss, ECF No. 628, and delivered a check to the Department of Justice with the goal of fully compensating eight federal agency advertisers for the damages they suffered and which the United States claims on their behalf. This motion may, according to Google, have a collateral impact on the arguments briefed herein. Plaintiffs address Google's arguments as raised in its Motion to Exclude the Testimony of Dr. Timothy Simcoe (ECF No. 580) as planned and intend to respond in due course to Google's recent filing.

[2] An ad exchange's "take rate" is the fee that the ad exchange educts from the advertiser's winning bid before the remainder of the bid is paid to the publisher. For example, Google's ad exchange, AdX, typically charged a 20% take rate, meaning that for every $1.00 spent by an advertiser, $0.20 was retained by Google as a fee for the ad exchange service. Exh. A, Simcoe Rep. ¶ 38.

Damages Apportionment Analysis that models how the AdX overcharge should be apportioned between Google's AdX publisher and advertiser customers. Each of these methodologies is conservative and understates the full harm resulting from Google's conduct. For example, Google's supracompetitive fees have an upward impact on the fees charged by other ad exchanges, causing the Comparables Approach to estimate a but-for take rate that is higher, and thus more generous to Google. Also, the Event Study Analysis only estimates harm from a subset of the broader range of Google's anticompetitive conduct.

Dr. Simcoe's application of these reliable and time-tested methodologies easily satisfies the standards for admissibility under Rule 702 and *Daubert.* Google quibbles with some of Dr. Simcoe's choices in implementing these methodologies, complains of steps he did not take, and hypothesizes ways in which his analysis could have been stronger. Many of these critiques are simply wrong, others are unrealistic, and, in any event, each of them is a point for cross-examination rather than a basis for exclusion under *Daubert*. None of Google's criticisms undermine the fundamental soundness of Dr. Simcoe's methodology and opinions.

Estimating damages in an antitrust case can be challenging because "[t]he vagaries of the marketplace usually deny us sure knowledge of what plaintiff's situation would have been in the absence of the defendant's antitrust violation." *J. Truett Payne Co., Inc. v. Chrysler Motors Corp.*, 451 U.S. 557, 566 (1981). As a result, no antitrust damages estimate can be perfect, nor need it be. Rule 702 only requires reliability, and "reliability does not require perfection." *In re Zetia (Ezetimibe) Antitrust Litig.*, 2022 WL 4362166, at *13 (E.D. Va. Aug. 15, 2022). Because Dr. Simcoe's opinions readily satisfy the standards of Rule 702, Google's motion to exclude his testimony should be denied.

BACKGROUND

Dr. Simcoe is an expert in the fields of industrial organization, econometrics, and business strategy. He holds advanced degrees in economics and business administration, teaches business strategy at the Boston University Questrom School of Business, and has published more than two dozen peer-reviewed academic articles. His academic work focuses on topics such as competition between firms, market power, monopolies, and other antitrust issues, and he has conducted research on technological interoperability, innovation, and the internet. He served as a Senior Economist on the President's Council of Economic Advisers from 2014 to 2015 and is currently a Research Associate at the National Bureau of Economic Research.

Pursuant to 15 U.S.C. section 15a, the United States seeks damages for the amount by which eight agencies of the United States Government that purchase digital advertising ("Federal Agency Advertisers" or "FAAs") were overcharged for open web display advertisements purchased through Google's ad exchange, AdX. AdX uses algorithmic real-time bidding to facilitate the purchase and sale of digital advertising. Dr. Simcoe estimated the portion of Google's AdX take rate that is supracompetitive, which is the extra amount it was able to charge advertisers that purchased advertising through its AdX product above the rate it could have charged in a more competitive world. Based in part on Dr. Simcoe's estimate, Plaintiff's accounting expert, Adoria Lim, then applied the estimated overcharge to the amount actually spent by advertisers generally and the FAAs specifically to the damages spent during the damges limitations period from January 25, 2019 through January 24, 2023. Exh. A, Excerpts of Expert Report of Timothy Simcoe, Ph.D. ("Simcoe Rep.") ¶ 131.[3]

[3] This exhibit, along with several other exhibits have been excerpted for length. The entirety of the relevant documents are available at the Court's request.

An overcharge, in the context of an antitrust claim, means the difference between what a customer actually paid and what that customer would have paid in a market untainted by the monopolist's anticompetitive conduct. Therefore, to calculate such an overcharge in this case, it is necessary to determine what fee AdX would have charged in a counterfactual "but-for" world in which Google's allegedly anticompetitive conduct had not occurred. Exh. A, Simcoe Rep. ¶ 103. To construct the but-for world, it is necessary to evaluate how competition would have presented itself absent Google's anticompetitive conduct, which in turn requires analysis of the firms, technologies, products, relevant markets, and alleged conduct at issue in this case. *Id.* ¶¶ 18-19; 63-66. In forming opinions about the but-for world, Dr. Simcoe reviewed and relied upon the opinions of economist Dr. Robin Lee regarding (a) the relevant antitrust markets in this case; and (b) Google's substantial and sustained market power in those markets. *Id.* ¶ 63; Exh. B, February 23, 2004 Deposition Excerpts of Timothy Simcoe ("Simcoe Dep.") 61:8-62:1.

To estimate the AdX take rate that would have prevailed in a more competitive, but-for world, Dr. Simcoe used a Comparables Approach and an Event Study Analysis.

I. Dr. Simcoe's Comparable Approach

In applying the Comparables Approach, Dr. Simcoe selected transactions that were as comparable as possible to AdX's transactions (impressions in the relevant market, as defined by Dr. Lee) and then used the weighted average take rates for those comparable transactions (as described below) as a "yardstick" to estimate what Google would have charged for open web display transactions on AdX in a more competitive market. Dr. Simcoe referred to this as the "market approach" because it relies on the market price of transactions in the real world as the primary evidence for the estimated fee that would be charged in a world untainted by the anticompetitive conduct at issue. Exh. A, Simcoe Rep. ¶ 137. It is analogous to comparing a

treatment group affected by a phenomenon to a control group not affected by the phenomenon in order to measure the phenomenon's impact. However, because of the pervasiveness and duration of Google's conduct, including the anticompetitive conduct at issue, all of the proper and available control groups were already impacted by Google's anticompetitive conduct and thus charged inflated fees due to a lack of competition in the ad exchange market. The fact that Dr. Simcoe did not decrease the amount of the "but for" take rate in light of that reality is an important reason why the Comparables Approach *overstates* the but-for take rate and *understates* the amount of Google's AdX overcharge.

To implement the Comparables Approach, Dr. Simcoe first identified the characteristics of the transactions for which the United States seeks damages, namely purchases of open-web display advertising. Exh. A, Simcoe Rep. ¶ 138. He then used those transaction criteria to identify comparable transactions executed in the relevant product and geographic markets. *Id.* ¶ 139. Once he selected transactions in the relevant market (that had adequate data for a reliable calculation), Dr. Simcoe selected transactions where advertisers paid an ad exchange other than AdX. *Id*. ¶ 140. Dr. Simcoe then weighted the exchanges from which the transaction data was observed by gross revenue (with ad exchanges with a higher share of total gross revenue being weighted more heavily to account for their larger presence—and competitive significance—in the relevant markets); calculated the weighted average fee for the comparable transactions (*i.e.*, the but-for fee); and compared Google's real-world fee to the but-for fee. *Id.* ¶ 138; ¶ 141-142. This approach yielded a conservative estimate of the degree to which Google's AdX take rate would be lower in a market absent Google's anticompetitive conduct. *Id.*

As a way of studying the comparability of open web display transactions for his Comparables Approach, Dr. Simcoe compared the average price paid for open-web display ads[4] against the average take rates charged by the ad exchanges that facilitated those transactions. This relationship is informative to the Comparables Approach because it is a rough proxy for the quality-adjusted cost of conducting an open web display transaction. To evaluate this relationship, Dr. Simcoe used a statistical regression to compare the average take rates of seven non-AdX ad exchanges to the average price of publisher impressions sold through each exchange. Exh. A, Simcoe Rep. ¶ 86. Dr. Simcoe's analysis showed that on ad exchanges not owned by Google, there was a positive relationship between the average price of impressions and the take rate the exchange charged. In other words, he found that exchanges which charged higher takes rates were associated with transactions that resulted in higher-priced impressions. *Id*. AdX's ratio of impression to take rate, however, bucked this market-wide trend: it charged the *highest* average take rate but *lowest* average impression price of any exchange studied. *Id.* This analysis supports the notion that Google enjoys an "unusual competitive position" relative to its rivals, and that, insofar as average price is a proxy for ad exchange quality, AdX's high take rate is not due to higher quality. *Id*. ¶ 87; Exh. C, Excerpts of Expert Rebuttal Report of Timothy Simcoe, Ph.D ("Simcoe Reb.") ¶ 74. However, Dr. Simcoe did not rely upon this regression alone to formulate any opinions about AdX's but-for take rate. Exh. B, Simcoe Dep. 179:9-12.

[4] The price of an open web display ad is typically measured in cost per thousand ad impressions, also called "cost per *mille*" or CPM. Exh. A, Simcoe Rep. Fig. 30.

II. Dr. Simcoe's Event Study Analysis

Dr. Simcoe's Event Study Analysis was an alternative, and complementary, approach to measure AdX's overcharge. Exh. B, Simcoe Dep. 197:5-8. The Event Study Analysis was a standard statistical regression measuring the effect of one type of Google's anticompetitive conduct—its imposition of Unified Pricing Rules ("UPR") in 2019—in combination with other, ongoing anticompetitive conduct. Exh. A, Simcoe Rep. ¶ 149. Through UPR, Google eliminated the ability of its publisher ad server customers to set minimum prices (or "price floors") for Google's ad exchange at higher rates than the price floors set for rival ad exchanges. *Id.* ¶¶ 31, 101. Before the imposition of UPR, publishers had the option to set different price floors for different ad exchanges in order to maximize revenue, foster competition among ad exchanges, control their own pricing, and mitigate risk. Specifically, publishers often preferred to set a higher price floor for AdX, the dominant ad exchange, than for its competitors. Through UPR, Google effectively imposed on the publisher customers of its dominant publisher ad server ("DoubleClick for Publishers" or "DFP")[5] an anti-steering or most-favored-nation ("MFN") rule[6]

[5] DFP's market share of open web display impressions (the instance of a particular advertisement being shown to a particular user on a web page) worldwide is around 90%. Exh. A, Simcoe Rep. ¶68; Fig. 30. Indeed, Google coerced publishers seeking access to AdX's real-time bidding functionality into using DFP instead of rival publisher ad servers. *See Id.* ¶¶95-98. Google likewise coerced publishers using DFP to use AdX as their ad exchange by limiting Google's unique Google Ads' advertiser demand to AdX. *Id.* ¶¶ 91-94.

[6] An anti-steering clause is a provision that bars a customer from trying to shift business from one firm to one of its competitors. Similarly, an MFN clause bars customers from preferring one supplier over another. Anti-steering and MFN clauses, like other contractual provisions that result in exclusivity, can be anti-competitive. *See, e.g., US Airways, Inc. v. Sabre Hldgs.*, 938 F.3d 43, 51, 60-63 (2d Cir. 2019) (anti-steering clause found anticompetitive); *In re: Payment Card Interchange Fee & Merchant Discount Antit. Litig*., 2024 WL 278565, at *5, *34, *35 (E.D.N.Y. Jan. 25, 2024) (similar); *United States v. Blue Cross Blue Shield of Mich.*, 809 F. Supp. 2d 665, 670, 674 (E.D. Mich. 2011); *Blue Cross & Blue Shield of Ohio v. Binngaman*, 1996 WL 677094, at *3 (N.D. Ohio 1996) (noting criticism of earlier cases accepting MFNs).

requiring that Google's ad exchange always receive the same price floor that a DFP publisher offered to rival ad exchanges. *Id.* ¶¶ 85, 101-102, 120. After UPR, Google's publisher ad server customers lost the ability to control their own pricing, optimize yields, and foster competition between ad exchanges by setting higher price floors for AdX. *Id.* ¶¶ 85 n. 125. Google unilaterally imposed UPR on its publisher customers without offering them any form of compensation or other consideration.

Despite publisher antipathy to this rule restricting their ability to set price floors for their own inventory, Google's imposition of UPR did, indeed, result in AdX winning more transactions, at the expense of rival ad exchanges and without having to alter AdX's supracompetitive take rate. Exh. A, Simcoe Rep. ¶ 149. In his Event Study, Dr. Simcoe estimated a "UPR-equivalent take rate," which is how much Google would have had to lower its take rate—a *procompetitive* behavior—to gain the same number of ad impressions for AdX that it otherwise gained from the *anticompetitive* imposition of UPR. In that sense, the "UPR-equivalent take rate" is an additional conservative estimate of what AdX's take rate would be in a more competitive market. Dr. Simcoe calculated the "UPR-equivalent take rate" with a regression that uses data from Google and third-parties, then subtracted this "UPR-equivalent take rate" from Google's current take rate to estimate a but-for take rate. *Id.* This methodology demonstrated that Google's take rate would be significantly lower in a competitive market, even with multiple conservative assumptions in the modeling.

While these clauses are at least part of a contractual bargain, here, Google's customers did not get such a benefit, since Google imposed UPR by fiat.

III. Dr. Simcoe's Damages Apportionment

Both advertisers and publishers are affected by AdX's supracompetitive take rate. That is why the final part of Dr. Simcoe's analysis apportioned the AdX overcharge between publishers and advertisers (including the eight FAAs whose damages are at issue here). Exh. A, Simcoe Rep. ¶ 159. Because Google's AdX take rate represents a fixed percentage of the transaction amount, it operates as a form of tax to the participants in the transaction. *Id.* ¶ 159. When a tax on a transaction is imposed, economic theory shows not just that buyers pay more (or that sellers receive less), but instead that *both* buyers and sellers will be negatively affected by the tax—regardless of who nominally pays. *Id.* ¶¶ 159-160. To measure how much of the economic impact (or "incidence") is borne by either buyers or sellers, economists compare the price elasticity of each group. Price elasticity is a concept used by economists to measure how changes in the price of a transaction impact the relative willingness of buyers or sellers to engage in that transaction.[7] Economic principles teach that the side of the transaction with more flexibility than the other will bear a relatively lower share of the tax's impact. Dr. Simcoe measured the elasticity of supply and demand for AdX advertisers and publishers by using a large set of Google data to simulate auction outcomes. *Id.* ¶ 197. Dr. Simcoe then compared these simulated auction outcomes to experiments that Google itself ran in the ordinary course of business to calculate the implied elasticities of supply and demand between these two customer groups. *Id,* ¶ 208.

[7] For example, if a buyer would respond to a 10% price increase on a product by buying 50% less of it, then she has a relatively "elastic" demand, but if a buyer would respond to a 10% price increase on a product by buying the same amount of it, then her demand is relatively "inelastic." The more sensitive a buyer (or seller) is to a price increase, the more "elastic" she is, the less sensitive, the more "inelastic."

LEGAL STANDARD

Rule 702 permits an expert to offer opinion testimony when the proponent of the expert has demonstrated to the court that it is more likely than not that: (1) the expert's "scientific, technical, or other specialized knowledge will help the trier of fact to understand the evidence or to determine a fact in issue"; (2) the expert's opinion is "based on sufficient facts or data" and "is the product of reliable principles and methods"; and (3) the expert's opinion "has reliably applied the principles and methods to the facts of the case." *In re Lipitor (Atorvastatin Calcium) Mktg. v. Pfizer, Inc.*, 892 F.3d 624, 631 (4th Cir. 2018) (quoting Fed. R. Evid. 702).

The Court's decision regarding admissibility does not require an evaluation of the strength or weight of the testimony. *Kumho Tire Co. v. Carmichael*, 526 U.S. 137, 141 (1999); s*ee also E.E.O.C. v. Freeman*, 778 F.3d 463, 466 (4th Cir. 2015) ("The scope of the court's gatekeeping inquiry will depend upon the particular expert testimony and facts of the case."). "[T]he *Daubert* inquiry focuses on the reliability of the expert's principles and methodology, rather than the conclusions generated." *United States v. Aman*, 748 F. Supp. 2d 531, 534 (E.D. Va. 2010). Criticisms about ways to "improve the precision of [an] experts' findings" do not justify exclusion of that expert's opinions. *Id*. at 536. Thus, "disagreement[s]" over methodology, such as "the values . . . assign[ed] to certain variables" are not grounds for exclusion. *Bresler v. Wilmington Trust Co.*, 855 F.3d 178, 195-96 (4th Cir. 2017); *see also Morrow v. Navy Fed. Credit Union*, No. 21-cv-722, 2023 WL 2874908, at *3 (E.D. Va. Apr. 6, 2023) ("[c]riticisms as to the inadequacies of an expert study or report, such as the failure to include certain variables" go to weight, not admissibility).

Furthermore, in antitrust cases in particular, courts should "observe the practical limits of the burden of proof" because "damage issues in these cases are rarely susceptible of the kind of

concrete, detailed proof of injury which is available in other contexts." *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123 (1969). Once liability is proven in an antitrust case, the burden of proving damages is "lightened" as "[t]he vagaries of the marketplace usually deny us sure knowledge of what plaintiff's situation would have been in the absence of the defendant's antitrust violation." *J. Truett Payne*, 451 U.S. at 566, 568. Accordingly, in an antitrust case, the jury need only "make a just and reasonable estimate of the damage," and "[t]he most elementary conceptions of justice and public policy require that the wrongdoer shall bear the risk of the uncertainty which his own wrong has created." *Bigelow v. RKO Radio Pictures*, 327 U.S. 251, 265 (1946); *Burlington Indus. v. Milliken & Co.*, 690 F.2d 380, 386 (4th Cir. 1982) ("[A]ntitrust damages can only be approximated," and antitrust violators "should be prevented from unfairly exploiting the complexity of factual issues occasioned by their unlawful conduct.").

ARGUMENT

I. Dr. Simcoe's Comparables Approach is Reliable

Dr. Simcoe's Comparables Approach methodology is a reliable and well-recognized method for determining damages, and Dr. Simcoe applied that methodology reliably here. *See, e.g.*, *Metrix Warehouse, Inc. v. Daimler-Benz Aktiengesellschaft*, 828 F.2d 1033, 1044 n.21 (4th Cir. 1987) (affirming that antitrust plaintiffs "may properly rely on a 'yardstick' measure of proof"). Calculating damages in a monopolization case like this one is often challenging because the monopolist's conduct has distorted prices by so much, for so long, that a world untainted by that conduct (the baseline for calculating damages) must be built, rather than observed. *See, e.g.*, *J. Truett Payne*, 451 U.S. at 566, 568. A comparable—often described as a "yardstick"—approach is one of the reliable ways to build that counterfactual world, and it is especially useful where, as here, "the pre-conspiracy prices are unreliable predictors of future prices." *In re*

Suboxone (Buprenorphine Hydrochloride & Nalaxone) Antitrust Litig., 421 F. Supp. 3d 12, 43 (E.D. Pa. 2019); *see supra* pp. 5-6 (describing yardstick methodology). By evaluating the prices of analogous transactions unaffected or less affected by the monopolist's anticompetitive conduct, one can reliably infer what prices would have prevailed in a more competitive market.

For yardstick analysis to be admissible, its "assumptions about market behavior" need only "rest on adequate bases," and there need only be "a reasonable comparability between the businesses or markets in question." *Metrix Warehouse*, 828 F.2d at 1044 n.21. Multiple factors should be considered to confirm that there is reasonable comparability, including "product, firm, and market comparability." *Home Placement Serv., Inc. v. Providence Journal Co.*, 819 F.2d 1199, 1206 (1st Cir. 1987). That said, "distinction[s] in market participants" are not a basis for exclusion unless they are so severe as to undercut "the validity of the[] [yardstick] as an index of behavior in [the relevant] market." *Metrix Warehouse*, 828 F.2d at 1044 n.21.

Here, Dr. Simcoe evaluated "the only available index" for AdX, *id.*, and the closest possible comparable transactions by selecting the same product type (open-web display advertising transactions on ad exchanges), from the same geographic market (worldwide), that were transacted using the same type of tool (ad exchanges). *See* Exh. A, Simcoe Rep. ¶¶216-218; Fig. 4; Fig. 5. This Comparables Approach was conservative, and understated the amount of the AdX overcharge, because it included transactions that occurred on other exchanges, but which still were executed in the same market in which AdX had already engaged in anticompetitive conduct for over a decade, including by charging supracompetitive take rates. As a matter of economics and based on the characteristics of competition in the ad exchange market, this means that AdX's supracompetitive take rate likely caused its competitors to raise their own take rates

above where they would be in a competitive environment. *See Id.* ¶¶ 144-148.[8] Thus the take rate that Dr. Simcoe estimated is likely higher than what the actual but-for take rate would be, meaning that any imprecision in Dr. Simcoe's estimate works in Google's favor by underestimating the harm caused by Google's conduct. This baked-in understatement of the impact of Google's conduct counsels for, not against, admissibility. *See, e.g., Lehrman v. Gulf Oil Corp.*, 500 F.2d 659, 669-70 (5th Cir. 1974) (affirming use of yardstick damages estimate where, although comparison firm differed from subject firm, differences likely "inured to the benefit of" defendant).

A. Dr. Simcoe Selected Appropriate Comparators

Dr. Simcoe appropriately based his Comparables Approach on digital advertising transactions that are reasonably comparable to the transactions that form the basis of Plaintiffs' damages claim: worldwide transactions for open-web display advertising that are made programmatically (*i.e.*, using automated techniques) through ad exchanges. In doing so, Dr. Simcoe relies on the economic analysis of Dr. Lee which concludes that open-web display advertising is a distinct and valuable form of advertising for publishers and advertisers. Exh. A, Simcoe Rep. ¶80; Exh. D, Excerpts of Expert Report of Robin S. Lee, Ph.D. ("Lee Rep.") ¶¶ 261-264.

Despite the natural comparability of the transactions Dr. Simcoe used and the rigorous nature of Dr. Lee's methodology, Google nonetheless argues that Dr. Simcoe's opinions are unreliable because (1) ad exchanges, rather than ad transactions, are the appropriate unit of

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[8] *See also*, Exh. E, Jan Potters & Sigrid Suetens, "Cooperation in Experimental Games of Strategic Complements and Substitutes," *The Review of Economic Studies* 76, no. 3 (2009): 1125–1147, at 1126 ("A straightforward but important implication of strategic complementarity is that a change in one player's choice gives the other player an incentive to move in the *same* direction").

comparison, and (2) Dr. Simcoe did not account for unspecified "differences" among the seven ad exchanges that facilitated the yardstick transactions. Def. Br. at 17-22. Both arguments are incorrect.

As an initial matter, the appropriate comparator is transactions, not exchanges, because what is being compared in Dr. Simcoe's analysis is (a) transactions subject to AdX's supracompetitive take rate *versus* (b) transactions that were not.[9] Furthermore, transactions are the appropriate unit of analysis and comparator because the damages being sought in this case are for a particular subset of transactions purchased through AdX, not the cost of all transactions flowing through AdX, regardless of their relationship to the relevant markets defined in this case. *See* Exh. A, Simcoe Rep. ¶ 137; Exh. C, Simcoe Reb. ¶ 48. At a minimum, Dr. Simcoe's evaluation of transactions, rather than exchanges, is a reliable judgment call that Google may attempt to test on cross-examination, but cannot be a basis on which to exclude his opinion.

Separately, even if exchanges were the correct unit of comparison, the seven ad exchanges whose transactions Dr. Simcoe uses as a yardstick are sufficiently comparable to AdX to make the Comparables Approach reliable. The opinions of Dr. Lee and the facts he cites, which Dr. Simcoe relied on and incorporated, provide more than sufficient evidence that the ad exchanges at issue (1) are in the same product market as AdX; (2) are in the same geographic market as AdX; (3) are either not differentiated at all or are differentiated[10] in limited ways; and

[9] Of course, to the extent all of the transactions occurred in the same market that was impacted by Google's anticompetitive conduct and supracompetitive take rate, the result of Dr. Simcoe's Comparables Approach is inherently conservative and underestimates the amount of the AdX overcharge. *See* Exh. A, Lee Rep. ¶ 144-148.

[10] For clarity, as an economist, Dr. Simcoe uses the term "differentiated products" to describe products that consumers perceive to differ from one another. Exh. C, Simcoe Reb. ¶ 72 n.110. A literal textbook example of how he uses "differentiated" would include a model that "might be used to study the restaurant market, in which firms produce differentiated products (such as a

(4) to the extent ad exchanges are differentiated *(see infra* pp. 12-13), they are distinguished favorably compared to AdX because Google has degraded AdX in comparison to its rivals.[11] *See Lehrman*, 500 F.2d at 669-70 (aspects of non-comparability that "inure[] to the benefit of" defendant are not a basis for excluding yardstick analysis).

Google quibbles with Dr. Simcoe by raising the specter of "differences" among ad exchanges that "might explain" differences in the prices of otherwise similar transactions. Def. Br. at 17-18; *id*. at 20 (hypothesizing other exchanges' "products or services are different or more valuable"). But Google does not say what those "differences" are, and Rule 702 does not require Dr. Simcoe to test every possible variable that "might explain" price differences. *See*, *e.g.*, *Bazemore v. Friday*, 478 U.S. 385, 400 (1986). Econometric analysis should endeavor to "account[] for the major factors," *id*., and one hallmark of reliability is that "an expert has accounted for obvious alternative explanations," *Roche v. Lincoln Property Co.*, 278 F. Supp 3d 744, 749 (E.D. Va. 2003). But Dr. Simcoe faithfully adhered to those principles, and if any specific alternative explanation here were "major" or "obvious," Google had every reason to describe it with specificity, but it did not. Mere disagreement about the extent of comparability goes to the weight of the evidence, not its admissibility. *See Image Tech. Serv., Inc. v. Eastman Kodak Co.*, 125 F.3d 1195, 1221 (9th Cir. 1997) (whether business "properly compares to the relevant market presents a question of fact for the jury"); *see also Bazemore*, 478 U.S. at 400 ("Normally, failure to include variables will affect the analysis' probativeness, not its admissibility.") (Brennan, J., concurring).

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different ethnic cuisines), but all compete for the same customers." *Id.* (citation and quotation marks omitted).

[11] *See* Exh. D, (Lee Rep.) at §V.C.3.b (discussing AdX quality degradation).

In fact, the record in this case shows that any differences among ad exchanges are minimal. For example, Google's principal economic expert testified that any differentiation is limited, Exh. F, Excerpts of Mark Israel Deposition 332:9-18, and Dr. Simcoe testified that, other than scale, there are not "large differences in exchange quality." Exh. B, Simcoe Dep. 170:5-9. Moreover, while Dr. Lee noted some differentiation in his product market for some "niche firms," this differentiation allows these firms to charge higher take rates than other firms. *See* Exh. G, Excerpts of Robin Lee Rebuttal Report ("Lee Reb.") ¶ 459 n.723. To the extent that there are unobservable quality metrics that could affect ad exchanges, there are different analyses other than a yardstick that can account for those differences because, by design, a yardstick analysis cannot control for unobservable variables. Here, Dr. Simcoe's separate Event Study Analysis *did* measure any such effects, through a regression modeling the effect of specific content and controlling for a detailed set of variables. Such a complementary analysis is intended to control for observable and unobservable reasons for the shift in transactions to AdX after the implementation of UPR. *See* Exh. C, Simcoe Reb. 53.

Google's failure to point to any "major factors" omitted from Dr. Simcoe's analysis distinguishes the present case from the cases Google relies on. Def. Br. pp. 18-19. For example, in *In re Live Concert Antitrust Litigation*, 863 F. Supp. 2d 966 (C.D. Cal. 2012), a comparison of live rock concerts promoted by two different firms was held to be unreliable because it failed to account for "artist quality/popularity," which "is undoubtedly a 'major factor' in determining ticket prices." *Id*. at 975-76. Likewise, in *Blue Cross & Blue Shield United of Wisconsin v. Marshfield Clinic*, 152 F.3d 588 (7th Cir. 1998), the yardstick analysis failed to account for "[t]he most important factors" bearing on prices, namely "the amount and quality" of a medical clinic's services "and its market share." *Id*. at 593. No similar failure occurred here: Dr. Simcoe

accounted for the product market and the geographic market, and he determined that the comparators used the same tools and exhibited the same range of prices for the impressions each transacted. Exh. C, Simcoe Reb. ¶¶ 50-55; Exh. B, Simcoe Dep. 199:8-17.

B. Dr. Simcoe Relied Upon All Available and Reliable Data

In performing his Comparables Analysis, Dr. Simcoe relied upon all data that was available and reliable, and Google's suggestion that Dr. Simcoe is "cherry picking" or somehow relying upon too small a slice of the relevant data is incorrect. Def. Br. p. 15. First, Dr. Simcoe's analysis was robust and captured the relevant market. Indeed, the transactions included in his analysis represent ***81%*** of all open-web display advertising transactions. See Exh. D, Lee Rep. Fig. 47; Exh. C, Simcoe Reb. ¶ 54. Second, there simply was no "cherry picking"; no reliable and available transaction data was excluded from Dr. Simcoe's analysis. Exh. B, Simcoe Dep. 197:13-198:3. To the extent that data from certain exchanges was omitted, it was because the data was too incomplete to calculate reliable take rates, not because Dr. Simcoe was "cherry picking," as Google contends, Def. Br. at 15. See Exh. D, Lee Rep. Fig. 110 (showing gaps in data).

C. Dr. Simcoe's Use of Weighted Averages Was Reliable

Dr. Simcoe appropriately weighted transactions' take rates by the size of the exchange (by revenue) on which they were transacted to account for the fact that "more important" exchanges "exert more influence" on the but-for take rate. Exh. A, Simcoe Rep. ¶ 143. Google is incorrect that Dr. Simcoe's estimate of the AdX overcharge is somehow unreliable because of the mathematical truism that certain of the comparable ad exchanges' take rates were higher than the weighted average take rate of the combined set of ad exchanges. *See* Def. Br. at 20. *First*, averages are, by definition, made up of some amounts higher and some amounts lower than the average. Thus, observing that some rates are higher than the average rate does not render Dr.

Simcoe's Comparables Approach invalid. *Second*, if anything, Google's complaint about Dr. Simcoe's inclusion of higher take rates from smaller, niche ad exchanges is proof that his conservative approach understated the harm from Google's conduct. Larger ad exchanges in Dr. Simcoe's sample generally yielded lower but-for take rates than smaller, niche exchanges. Exh. A, Simcoe Rep. Fig. 15. Indeed, the exchange with the lowest but-for take rate is Xandr—the largest ad exchange by market share other than AdX, and a firm that Google's expert, Mark Israel, called a "notable" and competitor. Exh. H, Excerpts of Mark Israel Report ¶ 272. Therefore, Dr. Simcoe's evaluation of a broad swath of data that included smaller, niche exchanges yielded a higher but-for take rate and a more conservative estimate of damages.

When a yardstick analysis has used a weighted average that was taken from transaction data, it has been found reliable under Rule 702. See *Hyland v. HomeServices of Am., Inc.*, No. 05-cv-612-R, 2012 WL 12995647, at *8 (W.D. Ky. July 3, 2012) (allowing testimony after finding data used weighted average was "not a perfect benchmark"). The cases that Google relies on for its assertion that averages are unreliable have less to say about averages than they do about the failure, in those cases, to properly account for salient differences in the yardstick firms that were used. *See Eleven Line, Inc. v. N. Texas State Soccer Ass'n, Inc.*, 213 F.3d 198, 208–09 (5th Cir. 2000) (comparison failed to account for numerous important factors, including "geographical location," "size or attractiveness," "relative costs of operation," or "amounts charged per team"); *Harris Wayside Furniture Co. v. Idearc Media Corp.*, No. CIV. 06-CV-392-JM, 2008 WL 7109357, at *2 (D.N.H. Dec. 22, 2008) (comparison failed to account for "size, geographic location, sales volume or market base"); CDW LLC v. NETech Corp., 906 F. Supp. 2d 815, 824 (S.D. Ind. 2012) (comparison did not account for "the market forces that affect (or affected) the revenues" of yardstick sales branches).

II. Dr. Simcoe's Event Study Analysis is Reliable

Dr. Simcoe's Event Study Analysis is admissible because it is reliable, and it appropriately accounted for all major variables. Dr. Simcoe relied on well-established economic principles and significant record evidence to conclude that it was unnecessary to include as an independent variable in the Event Study the fact of AdX's move to a unified first price auction[12] ("UFPA"), at the same time that Google imposed UPR by fiat. Multiple experts in this case—including Google's own experts—agree that switching auction formats from a second-price auction to a first-price auction, is unlikely to have a material effect on transaction volume. Hence, at most, the omission of such a variable goes to the weight of the Event Study Analysis, not its admissibility.

UFPA, which was implemented at the same time UPR was imposed, changed the format of AdX auctions from a first-price to a second-price auction. Exh. A, Simcoe Rep. ¶ 101. In conducting his Event Study, Dr. Simcoe carefully considered whether Google's switch to a first-price auction was likely to impact the results of his regression analysis. He correctly concluded that it would not based on the Revenue Equivalence Theorem, which is a well-recognized economic theory endorsed by many, including Google's own auction expert, Dr. Paul Milgrom. Widely accepted in economic literature, the Revenue Equivalence Theorem indicates that, holding all else equal, switching from a second-price to a first-price auction, or vice versa, does not impact the expected revenue of the seller or the expected payments from the buyer. *See* Exh. A, Simcoe Rep. ¶ 157. Dr. Milgrom, called it a "celebrated" principle of economics, and it is well-supported in the academic literature. *See*, e.g. Exh. I, Paul R. Milgrom, (2004), *Putting*

[12] A first price auction is an auction where bidders bid for an impression, and the highest bid wins and pays exactly the amount of its bid. In a second price auction, the highest bidder wins, but pays the value (or just slightly above the value) of the second-highest bid submitted in that same auction. Exh. J., Milgrom Rep. ¶¶ 242-45.

auction theory to work. Cambridge University Press, 73-77; *see also* Exh. J, Excerpts of Paul Milgrom Expert Report ¶¶ 242-245. Thus, there is no economic reason to expect that Google's 2019 shift in auction format was a "major factor" that needed to be accounted for in Dr. Simcoe's Event Study Analysis. *See Bazemore*, 478 U.S. at 400.[13]

Despite this well accepted principle in economic theory, Dr. Simcoe nonetheless performed additional analysis to confirm that the Revenue Equivalence Theorem would apply to the real-world facts he was evaluating. In particular, he examined Google's contemporaneous documents and data, which corroborate the validity of the Revenue Equivalence Theorem as applied to digital advertising auctions. Those documents showed that AdX's 2019 switch to a first-price auction likely had minimal or no effect on the number of impressions that went to AdX. One telling example is an experiment Google engineers ran in 2018 to determine what effect UPR and UFPA would have. That experiment showed that, "the primary benefit" of this dual change was "from lowered unified floors," *i.e.*, eliminating variable price floors, "not 'first price' in itself," *i.e.*, the move to a first-price auction." *See* Exh. K, GOOG-DOJ-AT-00588455, at -455. Google seeks to diminish the reliability of its employees 'own studies now, but it used such experiments in the ordinary course to make consequential business decisions. Its corporate representative testified that Google uses "sound data" to conduct such experiments to "have statistical confidence within the metrics" of what an effect would be if applied to the total number of impressions that go through its systems. *See* Exh. L, Excerpts of Deposition of Jason

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[13] The cases that Google cites are inapposite because they stand merely for the proposition that a regression should be excluded only where it blatantly fails. *See S. Pac. Commc'ns Co. v. Am. Tel. & Tel. Co.*, 556 F. Supp. 825, 1090 (D.D.C. 1982) (excluding "computer model" that was at "war with reality" in a number of ways); *Werdebaugh v. Blue Diamon Growers*, 2014 WL 7148923, at *10-11 (N.D. Cal. Dec. 15, 2014) (challenged model failed to control for "key factors").

Hsueh, 24:8–26:14; 28:3–10; *see also* Exh. M, Excerpts of Gabriel Weintraub Report ¶¶ 100-106.[14]

Ultimately, Dr. Simcoe's Event Study Analysis is conservative, and understates the amount of the AdX overcharge because at the same time Google moved to UPR and UFPA, it also discontinued another form of anticompetitive conduct. Namely, Google stopped a practice known as "last look" whereby Google allowed AdX to have a preferential "last look" at transactions after the header bidding auction was completed. Exh. D, Lee Rep. ¶¶ 753-54. Google documents acknowledge that discontinuing "last look" reduced the number of impressions won by AdX (*see, e.g.* Exh. N, GOOG-DOJ-AT02204351 at -359 ("Removing Last Look has significant negative impact "); but that downward effect on impressions is not built into the Event Study regression. In that regard, the Event Study *underestimates* the benefits of UPR, leading to more conservative results. See Exh. A, Simcoe Rep. ¶ 157.

Dr. Simcoe's two methods of determining the AdX overcharge are based on two different, equally reliable, methodologies. The fact that two methodologically distinct approaches still independently reached substantially similar, if conservative, results is a sign of the robustness of Dr. Simcoe's analysis.

III. Dr. Simcoe's Analysis of the Correlation Between Take Rate and Prices in The Ad Exchange Market Is Reliable

Dr. Simcoe's opinions about the correlation between average ad prices and average take rates for ad exchanges is a straightforward application of the well-established econometric technique of regression, using available, relevant data, to show that the relationship between

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[14] Google contends Dr. Simcoe "cherry picked" documents to inform his treatment of UFPA, Def. Br. at 24, but its only support for that claim—a single page from a single document that Dr. Simcoe considered in any event—suggests that a first-price auction would be positive for AdX's advertisers, not that it would lead to more impressions on AdX. *See* Exh. N, GOOG-DOJ-AT-02204351, at -4361 ("Overall performance of 1P change positive for AdX buyers").

AdX's average take rate and its average ad price differs significantly from that of rival ad exchanges.

Dr. Simcoe employed this well-tested analysis for a simple, but limited, purpose. He explained that the correlation analysis that he conducted is only one data point among many to suggest that AdX currently charges a supracompetitive take rate. Dr. Simcoe's correlation analysis did not, and was not meant to, calculate what AdX's take rate would be in a but-for world. Rather, Dr. Simcoe calculated a but-for take rate using the Comparables Approach and the Event Study Approach described above. Nonetheless, it is appropriate and relevant for the jury to hear that AdX is an outlier in the ad exchange market. The jury should be entitled to consider the evidence, for what it is worth, that AdX and AdX alone is able to charge a comparatively higher take rate for selling relatively lower-priced ads.

Google offers three critiques of Dr. Simcoe's analysis: (1) that its sample size is too small, (2) that its "p-value" is too high, and (3) that it does not account for all possible variables. None of these complaints are well founded, factually or legally, but even if they were, they sound only in issues of weight, not admissibility.

First, the sample size used by Dr. Simcoe for his analysis is sufficiently large to serve its limited purpose of evaluating the relationship between two variables. *See* Exh. B, Simcoe Dep. 178:5-10; *see also In re Lipitor*, 892 F.3d at 833-34 (choosing test "to extrapolate meaning from data" is "a matter of selecting the appropriate tool for the task"). Indeed, one of Google's experts, Dr. Judith Chevalier, offers opinions based on calculations using a similarly small number of observations. *See* Exh. O, Judith Chevalier Expert Report ("Chevalier Rep.") ¶ 79 & Fig. 12 (calculating standard deviation using seven observations). Google does not point to any relevant observations that Dr. Simcoe failed to include, nor could they, because Dr. Simcoe

considered all available observations—all ad exchanges with enough data to reliably calculate average prices and take rate are included.

Second, and for similar reasons, the "p-value" of Dr. Simcoe's regression is sufficiently low to be reliable for its limited purpose. A p-value measures the probability of a false positive. *See, e.g.*, *Matrixx Initiatives, Inc. v. Siracusano*, 563 U.S. 27, 39 n.6 (2011). Specifically in the case of Dr. Simcoe's regression, it measures the probability of observing the same (or more extreme) average prices and take rates if average prices were not correlated positively with take rates (that is, the higher the ad price, the higher the take rate). There is no bright-line rule about a maximum reliable p-value, and the relatively high p-value associated with Dr. Simcoe's regression goes to its weight, not its admissibility. The jury should be permitted to evaluate for themselves whether the chances of a false positive undermines Dr. Simcoe's opinion that higher ad prices are associated with higher take rates for non-AdX exchanges, but not for AdX. *See, e.g.*, *In re Urethane Antitrust Litig.*, 166 F. Supp. 501, 508-09 (D.N.J. 2016) (denying motion to exclude regression whose p-values were high, concluding that "statistical significance issues go to the weight of the models, not their admissibility").

Third, as discussed *supra* pp. 14-15, ad exchanges are at most differentiated in limited ways, and any observable differences among them support the correlation that Dr. Simcoe found. In that sense, it is reasonable to observe that smaller, niche ad exchanges with lower market share but higher take rates, tend to sell ads at higher prices. *See* Exh. G, Lee Reb. ¶ 459 n.723. Once again, Google fails to identify with any particularity any of the so-called "myriad" considerations that Dr. Simcoe ignored in his analysis, let alone does Google explain how such a purported failure would detract from the reliability of Dr. Simcoe's analysis. Def. Br. at 14.

IV. Dr. Simcoe's Damages Apportionment Based on a Tax Incidence Model Is Appropriate

Dr. Simcoe appropriately apportioned damages attributable to AdX's supracompetitive take rate to AdX's two kinds of customers: publishers and advertisers. The tax-incidence model Dr. Simcoe used to estimate apportionment is a reliable methodology for apportioning a fee like the one Google charges for its AdX exchange, and he applied it reliably to the facts of this case. As discussed *supra* pp. 8-9, this model is based on the "elasticity" of buyers and sellers in the market and measures the sensitivity of each group to a change in price. The more "elastic" group bears less of the burden of AdX excess fees, and the less "elastic" group bears more of the burden. Dr. Simcoe carefully and reliably studied AdX buyers' elasticity of demand relative to AdX sellers' elasticity of supply, using a large set of Google's own bidding data. This method accounts for the eight FAAs' elasticity of demand because they participated in the very same open-web display auctions that Dr. Simcoe used to estimate apportionment.

Google questions whether Dr. Simcoe's analysis was sufficiently individualized to the FAAs. That criticism, however, is misguided because (1) Google misunderstands the function and purpose of the tax-incidence model that Dr. Simcoe used, which Google does not dispute is reliable, and (2) in any event, there is no reason to believe the FAAs' circumstances differ so much from those of other AdX buyers that some kind of adjustment to the tax-incidence model would be warranted, let alone required.

First, a tax incidence model considers the elasticity of demand and supply for *a product,* not the elasticity of individual buyers or sellers.[15] The elasticity of demand for open-web display

[15] *See generally* Exh. P, Dennis W. Carlton & Jeffrey M. Perloff, *Modern Industrial Organization*, (Pearson: Essex, 4th ed. 2015), 85–88; *see also*, Exh. Q, Justin Marion & Erich Muehlegger, *Fuel tax incidence and supply conditions*, Journal of Pub. Econ. 95, no. 9–10 (2011): 1202–1212.

advertising—the demand elasticity Dr. Simcoe estimated—does not depend on all advertisers being similar. *See* Exh. C, Simcoe Reb. ¶¶ 27-31. This is because, as an economic matter, apportionment of a tax is determined by the market-wide forces of supply and demand (composed of all individual buyers' and sellers' elasticities) that set the market-clearing price for a product. *See, e.g.*, *id*. ¶ 29. For example, imagine that the market-clearing retail price of gasoline is $1 per gallon. A gas tax would case gas stations to supply less gas at any given price, which would raise the market-clearing retail price to $1.10 per gallon, and diminished demand at that higher price would cause gas stations' revenue to fall to $0.90 per gallon. In this scenario, the $0.20-per-gallon tax would be borne equally by buyers and sellers *as groups* —gas stations receive $0.10 less per gallon, and customers pay $0.10 more per gallon—regardless of whether some individual customers are more elastic (*e.g.*, they can get around by bicycle instead of by car) or less elastic (*e.g.*, they use their car to run a business). *See id*.

Google does not dispute that the tax incidence model Dr. Simcoe used is a widely accepted and reliable method for estimating the apportionment of a tax-like fee on a set of transactions that is borne by both sides of the transactions. It also does not contend that Dr. Simcoe deviated from that tried-and-true method or that a tax-incidence model is inappropriate to measure apportionment of the AdX take rate. Rather, Google raises a criticism that misunderstands the nature and purpose of the tax-incidence model altogether: Google claims that Dr. Simcoe failed to tailor his apportionment to the FAAs' individual demand elasticities. Def. Br., at 24-27. This argument misses the mark because it proceeds from the faulty premise that Dr. Simcoe based his tax-incidence model "on an assumption" that "the FAAs are 'representative'—*i.e.*, an average—worldwide advertiser." *Id.* at 24. He made no such

assumption, nor is such an assumption necessary to determine how a tax-like fee is borne by two sides of a taxed transaction, which is what the tax-incidence model does here.

Second, even if individualized inquiry were required to apply a reliable tax-incidence model, there is no reason to conclude that the supply-and-demand forces that apply to the FAAs' purchases of open-web display advertising deviated significantly from those that applied to the purchases of other AdX buyers. Google points to no "major factors" that Dr. Simcoe failed to account for in his model. In this regard, the key question for a tax-incidence model is whether the FAAs purchased impressions that were economically similar to those purchased by other advertisers, not whether the FAAs have the same budgets constraints, advertising strategies, or target audiences as other advertisers. *See* Exh. C, Simcoe Reb. ¶¶ 30-31. Dr. Simcoe evaluated this question and concluded that the impressions were reasonably similar by looking at their price. He concluded that any variation in the average price paid by the FAAs versus all other advertisers is minimal, both by Dr. Simcoe's standards as well as those of Google's own experts. *See* Exh. C, Simcoe Reb. ¶ 35 (variation is 0.09 of the standard deviation in CPMs for all advertisers); see also Exh. O, Chevalier Rep. ¶ 79 (concluding this level of deviation is "small" and that "[d]ata points within one standard deviation of the mean typically are not considered outliers"). The impressions bought by the FAAs are therefore not meaningfully different, as a matter of economics, from the other impressions Dr. Simcoe analyzed to calculate apportionment.

Google hypothesizes "why it is possibly the case" that FAAs are "not representative" of all advertisers, Def. Br. at 26-27, but these hypotheses are inapt because they do not bear upon how market-wide forces determine how the economic burden of AdX's take rate is apportioned between advertisers and publishers, which is the question Dr. Simcoe's tax-incidence model

answered. Google may view these distinguishing criteria as "important facts of this case," *id*., but that does not mean that they are relevant factors in determining how to apportion the AdX overcharge to the two groups who bear it (advertisers and publishers), let alone "major factors" that would need to be accounted for in order for Dr. Simcoe's analysis to be reliable. *See Bazemore*, 478 U.S. at 400.

The cases Google cites do not suggest a contrary outcome. Those cases do not concern reliable application of a tax-like fee nor do they suggest that Dr. Simcoe's analysis is flawed. Instead, they stand for the uncontroversial proposition that experts must consider all "obvious and uncontested material facts" that could plausibly undermine the validity of their opinions. *See LeClercq v. The Lockformer Co.*, No. 00-C-7164, 2005 WL 1162979, at *4 (N.D. Ill. Apr. 28, 2005) (excluding hydrogeology expert who did not account for uncontested evidence that was "clearly material" and that "undermines the reliability" of his conclusions); *El Aguila Food Prods., Inc.* v. *Gruma Corp., Inc.*, 301 F. Supp. 2d 612, 620-24 (S.D. Tex. 2003) (excluding marketing expert "on several grounds," including because "his opinion is not based on the facts of the case" and because his "opinion is based on wholly insufficient data"). Because Dr. Simcoe satisfied that standard, those cases are inapposite.

V. Google's Legal Arguments Are Not a Basis to Exclude Dr. Simcoe's Opinions

Google's final arguments for excluding Dr. Simcoe's opinions do not concern the merits of his analysis or opinions, but instead arise entirely from arguments Google makes elsewhere. *See* ECF 574 (Memorandum of Law in Support of Google LLC's Motion to Exclude the Testimony of Prof. Robin S. Lee); ECF 570 (Google LLC's Memorandum of Law in Support of Its Motion for Summary Judgment). The Court should reject these arguments for the reasons Plaintiffs explain in opposition to Google's motion for summary judgment and motion to exclude Dr. Lee.

CONCLUSION

For the foregoing reasons, Google's motion to exclude Dr. Simcoe's Testimony should be denied in its entirety.

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